

WHAT IS CLAIMED IS:

1. An information recording apparatus for recording information to be recorded in an information recording medium and generating reproduction controlling information for controlling a reproduction manner upon reproducing the recording information after recording at the time of recording of the recording information to record it in the information recording medium as well as the recording information, the information recording apparatus comprising:
  - 10 a designating device for designating division timing in the recording information in case of dividing continuous recording information to record it in the information recording medium;
  - 15 a recording device for recording former part recording information which is the recording information before the designated division timing, and latter part recording information which is the recording information after the designated division timing, in the information recording medium; and
  - 20 a generating and recording device for repeating generating former reproduction controlling information which is the reproduction controlling information in associated with the former part recording information, and latter reproduction controlling information which is the reproduction controlling information in associated with the latter part recording information to record them in the information recording medium every time when the division timing is designated.

2. An information recording apparatus for newly generating division reproduction controlling information which is reproduction controlling information for dividing and reproducing the recording information from an information recording medium, in which continuous recording 5 information and the reproduction controlling information for controlling the reproduction manner of the recording information are recorded, to record it in the information recording medium, the information recording apparatus comprising:

10 a designating device for designating a division timing in the recording information; and

15 a generating and recording device for repeating newly generating former reproduction controlling information which is the reproduction controlling information, in associated with former part recording information which is the recording information before the designated division timing, and latter reproduction controlling information which is the reproduction controlling information in associated with latter part recording information which is the recording information after the designated division timing, to record them as the division reproduction controlling information in the information recording medium every time 20 when the division timing is designated.

25 3. The information recording apparatus according to claim 2, wherein the designating device comprises a reproduction designating device for designating the division timing while reproducing the recording information, which is recorded.

4. The information recording apparatus according to claim 2,  
wherein the former reproduction controlling information includes order  
information to indicate a reproduction order of the former part  
recording information and range information to indicate a range where  
5 the former part recording information is recorded in the recording  
information; and the latter reproduction controlling information  
includes order information to indicate a reproduction order of the latter  
part recording information and range information to indicate a range  
where the latter part recording information is recorded in the recording  
10 information.

5. The information recording apparatus according to claim 3,  
wherein the former reproduction controlling information includes order  
information to indicate a reproduction order of the former part  
recording information and range information to indicate a range where  
15 the former part recording information is recorded in the recording  
information; and the latter reproduction controlling information  
includes order information to indicate a reproduction order of the latter  
part recording information and range information to indicate a range  
information; and the latter reproduction controlling information  
includes order information to indicate a reproduction order of the latter  
part recording information and range information to indicate a range  
20 where the latter part recording information is recorded in the recording  
information.

6. The information recording apparatus according to claim 1,  
wherein the recording information comprises audio information  
25 including at least music information and voice information.

7. The information recording apparatus according to claim 2, wherein the recording information comprises audio information including at least music information and voice information.

5 8. The information recording apparatus according to claim 1, wherein the information recording medium is a DVD capable of recording the information.

9. The information recording apparatus according to claim 2,

10. wherein the information recording medium is a DVD capable of recording the information.

10. An information recording method of recording information to be recorded in an information recording medium and generating reproduction controlling information for controlling a reproduction manner upon reproducing the recording information after recording at the time of recording of the recording information to record it in the information recording medium as well as the recording information, the information recording method comprising the processes of:

20 designating a division timing in the recording information in case of dividing continuous recording information to record it in the information recording medium;

recording former part recording information which is the recording information before the designated division timing, and latter

25 part recording information which is the recording information after the designated division timing, in the information recording medium; and

repeating generating former reproduction controlling information which is the reproduction controlling information in associated with the former part recording information, and latter reproduction controlling information which is the reproduction controlling information in 5 associated with the latter part recording information to record them in the information recording medium every time when the division timing is designated.

11. An information recording method of newly generating division 10 reproduction controlling information which is reproduction controlling information for dividing and reproducing the recording information from an information recording medium, in which continuous recording information and the reproduction controlling information for controlling the reproduction manner of the recording information are recorded, to 15 record it in said information recording medium, the information recording method comprising the processes of:

designating a division timing in the recording information; and  
repeating newly generating former reproduction controlling information which is the reproduction controlling information in 20 associated with the former part recording information which is the recording information before the designated division timing, and the latter reproduction controlling information which is the reproduction controlling information in associated with the latter part recording information which is the recording information after the designated 25 division timing, to record them as the division reproduction controlling

information in the information recording medium every time when the division timing is designated.

12. The information recording method according to claim 11, wherein  
5 the process of designating the division timing designates the division timing while reproducing the recording information, which is recorded.

13. The information recording method according to claim 11, wherein  
10 the former reproduction controlling information includes order information to indicate a reproduction order of the former part recording information and range information to indicate a range where the former part recording information is recorded in the recording information; and the latter reproduction controlling information includes order information to indicate a reproduction order of the latter part recording information and range information to indicate a range where the latter part recording information is recorded in the recording information.

14. The information recording method according to claim 12, wherein  
20 the former reproduction controlling information includes order information to indicate a reproduction order of the former part recording information and range information to indicate a range where the former part recording information is recorded in the recording information; and the latter reproduction controlling information includes order information to indicate a reproduction order of the latter part recording information and range information to indicate a range

where the latter part recording information is recorded in the recording information.

15. The information recording method according to claim 10, wherein  
5 the recording information comprises audio information including at least music information and voice information.

16. The information recording method according to claim 11, wherein  
the recording information comprises audio information including at  
10 least music information and voice information.

17. The information recording method according to claim 10, wherein  
the information recording medium is a DVD capable of recording the  
information.

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18. The information recording method according to claim 11, wherein  
the information recording medium is a DVD capable of recording the  
information.